PERSONALITY MEASURES AS PREDICTORS OF LONG-TERM EMPLOYMENT IN AIR FORCE OFFICERS

THESIS

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ABSTRACT

High degrees of organizational turnover have been associated with decreased customer satisfaction, increased customer turnover, decreased employee productivity, decreased organizational performance, and decreased profitability. As such, more than 1,500 studies have been performed in the past 50 years on the topics of retention and turnover. This study aimed to examine possible relationships between the personality make up of Air Force officers and their retention within the United States Air Force. If present, such relationships might offer avenues for improving recruitment and retention efforts within the Air Force.

Between 1996 and 1997, 318 officer candidates attending the United States Air Force Officer Training School were administered personality surveys, including measures for extraversion, agreeableness, conscientiousness, openness to experience, emotional stability, positive and negative affect, and general self-efficacy. In 2009, the Air Force Personnel Center records of these officers were examined, and separation and retention data was collected for each participant. A correlation study was performed in order to determine which (if any) personality measures held significant relationships with observed turnover. Other variables were also considered, including job satisfaction, organizational commitment, and prior enlisted service. None of the personality measures demonstrated a significant relationship with turnover.

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PERSONALITY MEASURES AS PREDICTORS OF LONG-TERM EMPLOYMENT IN AIR FORCE OFFICERS

CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

An important issue in the study of management is employee turnover and retention (Holtom, Mitchell, Lee & Eberly, 2008). Turnover is defined as the act of an employee leaving an organization (Griffith & Hom, 2001). While some turnover may be desirable, particularly when initiated by an organization (i.e., the termination of a poor performer), turnover frequently involves losing employees organizations would prefer to keep. The costs of losing such employees can be substantial and generally require replacements be recruited, hired, trained, and given time to gain job proficiency. While the costs of these activities will vary based on the organization, a common estimate for the cost to replace an existing employee is one year's salary for the position replaced (Branham, 2005; Davidson & Fitz-Enz, 1997).

Given these costs, it is not surprising the retention of those individuals that organizations would like to keep is an important management and research issue. Research suggests retention of high-quality employees is not only important today, but will be equally, if not more, important in the future (Holtom, et al., 2008). Drucker (1999) predicted this when he suggested a decade ago that capable employees have become an increasingly important company resource since the introduction of the information age. McKinsey & Company more recently expressed the same idea through a study involving nearly 6,000 managers in 77 companies, concluding the most important corporate resource over the next 20 years will be clever, technologically literate, globally

savvy, and operationally innovative employees (Michaels, Handfield-Jones, & Axelrod, 2001).

A particularly unique challenge faced by leaders is the turnover of individuals early in their tenure with the organization. Research has indeed indicated that turnover often occurs early in any employee's tenure (Hom & Griffeth, 1995; Hom, Roberson, & Ellis, 2008). In the military, this issue is minimized to some extent because members come into the service with an obligation to serve a specific period of time (i.e., four years for most officers). Still, many military members enter the service with advance plans to quit after this initial obligation (Holt, Rehg, Lin & Miller, 2007). Moreover, departures at the conclusion of an initial obligation may be more problematic for the military because it, like several professional service firms, promotes primarily from within. That is, the military trains and develops their younger members into future leadership and management positions, relying on this internal labor market. This deliberate grooming process often requires significant time. When military members leave voluntarily, for instance, new members must be recruited, trained, become proficient, become accustom to the military's culture, and acquire several years of experience before assuming more senior leadership positions (Holt et al., 2007).

If predictors of early turnover or retention could be identified, employers such as the military could focus recruitment and selection efforts towards those candidates most likely to remain within the organization for an extended period of time. Several studies have explored turnover within the military (e.g. Castro & Alder, 2005; Holt et al., 2007; Huffman, Adler, Dolan, & Castro, 2005). These studies have primarily examined the extent to which organizational or cultural factors, such as the operations tempo, have

influenced turnover intentions and the decisions of its members. Conversely, little research has examined the relationship between personality traits of the members themselves, such as extroversion, and turnover rates. Employee personality traits, such as the "Big Five" (viz. extraversion, neuroticism, openness to experience, agreeableness, and conscientiousness) have been linked to employee's occupational selection (Judge, Higgins, Thoresen, & Barrick, 1999). These same personality factors also contribute to an employee's intrinsic and extrinsic career success, including factors such as job satisfaction (Judge, et al., 1999). From this, it is reasonable that military members' personality may be linked to early employee turnover or long-term retention. Exploration of the possibility of such a relationship could provide worthwhile insights to current turnover and retention literature that has examined military contexts. Accordingly, it is the intention of this research to determine if such a correlation exists. Specifically, this research will examine whether several personality traits to include the "Big Five", positive and negative affect, and general self-efficacy correlate to employee turnover or retention in the military service of Air Force officers.

Employee Turnover

As noted, voluntary employee turnover is among the most studied behaviors in management research (Maertz & Campion, 2004; Horn & Kinicki, 2001; Griffeth, Hom & Gaertner, 2000). High degrees of organizational turnover have been associated with decreased customer satisfaction (Koys, 2001), increased customer turnover (Bowen & Siehl, 1997; Ulrich, Halbrook, Meder, Stuchlik, & Thorpe, 1991; Schneider & Bowen, 1985), decreased employee productivity (Huselid, 1995), decreased organizational performance (Baron, Hannan, & Burton, 2001) and decreased organizational profitability

(Zimmerman, 2008; Glebbeek & Bax, 2004). In an effort to better understand and control the phenomenon of undesirable employee turnover, more than 1,500 studies have been performed in the past 50 years on the topics of retention and turnover (Holtom, et al., 2008). Many of these studies have focused on controls to work environment, or situational factors such as job characteristics, with little or no regard for the dispositional characteristics of employees (Zimmerman, 2008; Staw, Bell, & Clausen, 1986). While understanding the relationship between employee turnover and organizational factors is beneficial, it should be noted employees remain key players within such relationships. For example, employees who have frequently changed jobs in the past have been found to be more likely than others to do so again (Judge & Watanabe, 1995; Ghiselli, 1974). Many researchers have suggested individual attributes such as personality may affect turnover (Zimmerman, 2008; Salgado, 2002; Hom & Griffeth, 1995; Steers & Mowday, 1981; Mobley, Griffeth, Hand & Meglino, 1979). Still others have called for additional research on methods to control turnover by focusing on applicants (Zimmerman, 2008; Johns, 2002; Griffeth, Hom, & Gaertner, 2000; McEvoy & Cascio, 1985).

Three meta-analyses have specifically included the relationship between the Big Five personality traits and turnover with conflicting results (Zimmerman, 2008; Salgado, 2002; Barrick & Mount, 1991). Barrick and Mount (1991) concluded no significant relationships existed, reporting effect sizes between .12 for Conscientiousness and .02 for Emotional Stability. Salgado (2002) found much more significant relationships, reporting effect sizes between -.35 for Emotional Stability and -.14 for Openness to Experience. More recently, Zimmerman (2008) used meta-analytic estimates to predict effect sizes between -.25 for Agreeableness and -.04 for Extraversion. The findings of

these three studies are compiled in Table 1. Regardless of the conflicting results which have been observed, one common theme seems to be repeated in these studies: the relationship between personality and turnover should continue to be studied. Moreover, none of these studies focused on samples of military members in their analyses

Job Satisfaction

One of the most common factors examined in the study of turnover is job satisfaction (Tett & Meyer, 1993). Job satisfaction is defined as one's affective attachment to a job (Tett & Meyer, 1993). Low levels of job satisfaction have been associated with higher levels of frustration, psychological withdrawal, lower life satisfaction, decreased organizational performance, and higher absenteeism (Harpaz, 1983). Not surprisingly, many studies have identified a negative correlation between job satisfaction and voluntary turnover (Tett & Meyer, 1993; Cotton & Tuttle, 1986; Harpaz, 1983; Angle & Perry, 1981; Mobley, Griffeth, Hand & Meglino, 1979) including studies specifically examining military personnel (Lytell & Drasgow, 2009; Chen & Ployhart, 2006; Kim et al, 1996).

Organizational Commitment

Another common measure in the study of turnover is organizational commitment (Tett & Meyer, 1993). Organizational commitment may be based upon at least three distinct themes: commitment as an affective attachment to the organization, commitment as a perceived cost associated with leaving the organization, and commitment as an obligation to remain with the organization (Meyer, Allen, & Smith, 1993; Meyer & Allen, 1991). These themes are sometimes articulated as affective commitment (Porter et al., 1974), continuance commitment (Becker, 1960), and normative commitment

(Wiener, 1982), respectively. Organizational commitment has been consistently reported to be positively correlated with job satisfaction (Tett & Meyer, 1993; Dougherty, Bluedorn, & Keon, 1985; Clegg, 1983) and negatively correlated to turnover (Griffeth, et al., 2000; Hackett, Bycio, & Hausdorf, 1994; Tett & Meyer, 1993; Hollenbeck & Williams, 1986; Bluedorn, 1982; Arnold & Feldman, 1982).

Table 1. Previous research results between the Big Five and turnover.

Personality Dimension	K	N	r	Citation
Extraversion	13	1437	-.03	Barrick & Mount (1991)
	4	554	-.20	Salgado (2002)
	18	1608	-.04	Zimmerman (2008)
Emotional Stability	13	1495	.02	Barrick & Mount (1991)
	4	554	-.35	Salgado (2002)
	19	1824	-.18	Zimmerman (2008)
Openness to Experience	12	1628	-.11	Barrick & Mount (1991)
	4	554	-.14	Salgado (2002)
	16	1563	.10	Zimmerman (2008)
Agreeableness	15	1838	.09	Barrick & Mount (1991)
	4	554	-.22	Salgado (2002)
	15	1532	-.25	Zimmerman (2008)
Conscientiousness	19	2759	.12	Barrick & Mount (1991)
	5	748	-.31	Salgado (2002)
	17	1631	-.20	Zimmerman (2008)

Notes: K = number of independent samples; N = corrected sample size; r = observed effect size.

Extraversion

Traits frequently associated with extraversion include being sociable, gregarious, assertive, talkative, and active (Barrick & Mount, 1991). Given these characteristics, there have been competing theories presented as to the link between extraversion and turnover. These traits may be expected, for instance, to be negatively related to turnover.

Essentially, this is hypothesized because the sociable, gregarious, and assertive member might be expected to easily become part of the social and professional network in the organization. Indeed, research suggests the higher the number of formal and informal connections between an employee and their work associates, the more embedded or bound the employee may be to their job or organization (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). Moreover, social integration has been negatively associated with individual turnover, while socially distant group members may be more likely to leave an organization (O'Reilly, Caldwell, & Barnet, 1989).

In contrast, others have suggested the relationship between extraversion and turnover could be positive. Those high in extraversion would be expected to be equally sociable and gregarious with those outside the organization, leaving more networking opportunities (Wanberg, Kanfer, and Banas, 2000) and perceiving a larger number of alternate employment opportunities (March & Simon, 1958). Interestingly, the meta-analytic findings have suggested little if any empirical relationship exists (see Table 1). Barrick and Mount (1991) reported no significant relationship between extraversion and turnover, with an effect size of -.03 and an *N* of 1,437. Zimmerman (2008) predicted a similar effect size of -.04 with an *N* of 1,608. Salgado (2002) reported a somewhat stronger relationship of -.20 with an *N* of 554. Given these inconsistent results, it was difficult to develop a clear hypothesis. Thus, the following null hypothesis is posited:

Hypothesis 1: Extraversion will not be significantly related to turnover.

Emotional Stability

Emotional stability is characterized by resiliency, assertiveness, coping, and stress-management skills (Jonas, 2005). The opposite of emotional stability,

neuroticism, is commonly associated with being anxious, depressed, angry, embarrassed, emotional, worried, and insecure (Barrick & Mount, 1991). Individuals low in emotional stability tend to have negative perceptions of themselves and their environment (Burke, Brief, & George, 1993; Watson, Clark, & Tellegen, 1988) and are more likely to encode and recall negative information (Weiss & Cropanzano, 1996; Watson & Clark, 1984). Emotional stability may then be negatively related to turnover, as employees with negative views of their work environment are more likely to leave (Maertz & Griffeth, 2004). In contrast, high emotional stability has been linked to higher levels of job satisfaction (Furnham & Zacherl, 1986). Emotionally unstable individuals tend to have higher conflict with coworkers (Organ, 1994). Further, persons low in emotional stability tend to be unsure about their ability to perform their job (Judge & Ilies, 2002). Meta-analytic research regarding the relationship between emotional stability and turnover has been inconsistent (see Table 1). Barrick and Mount (1991) reported no significant relationship between emotional stability and turnover, with an effect size of .02 and an N of 1,495. Zimmerman (2008) suggested a negative relationship exists predicting an effect size of -.18 with an N of 1,824. Salgado (2002) reported an even larger negative relationship with an effect size of -.35 and an N of 554.

Hypothesis 2: Emotional Stability will be negatively related to turnover.

Openness to Experience

Openness to experience is commonly associated with being imaginative, cultured, curious, original, broad-minded, and artistically sensitive (Barrick & Mount, 1991). Some researchers have suggested individuals with high openness to experience may value changing jobs, perceiving opportunities for personal growth and experience

(Zimmerman, 2008; Maertz & Griffeth, 2004). Such individuals might be expected to be more likely than others to leave an organization, regardless of how they feel about their current job. Indeed, Ghiselli (1974) described a "Hobo Syndrome" in which certain employees experienced a degree of wanderlust which led to repeated turnover within various organizations. However, others have suggested those with high openness to experience might experience more positive attitudes towards learning experiences, greater motivation to learn upon entry to training programs, and consequently more benefit from such training (Barrick & Mount, 1991). Such individuals might be expected to be more likely to seek development opportunities within their current organizations, increasing their possibility for retention.

Meta-analytic findings have varied regarding openness to experience and turnover (see Table 1). Barrick & Mount (1991) reported an effect size of -.11 with an N of 1,628. Salgado (2002) reported a similar effect size of -.14 with an N of 554. Zimmerman (2008) predicted an effect size of .10 with an N of 1,563.

Hypothesis 3: Openness to Experience will be positively related to turnover.

Agreeableness

Agreeableness is associated with adjectives such as helpful, generous, selfless, and courteous, and likely is a factor in determining how well a person typically "gets along with" those around them (Organ, 1994). Agreeable persons are more likely to have successful relationships with others (McCrae & Costa, 1991). Agreeableness has been associated with job satisfaction, particularly an employees' satisfaction with coworkers (Organ & Lingl, 1995). Agreeable persons may form more interpersonal relationships within an organization, increasing their job embeddedness (Mitchell et al., 2001).

Compliance and dependence aspects of agreeableness may also lead to greater perceived contractual obligations to stay within an organization (Zimmerman, 2008; Maertz & Griffeth, 2004).

Research has reported differing results regarding agreeableness and turnover (see Table 1). Zimmerman (2008) predicted agreeableness to be negatively correlated with turnover with an effect rate of -.25 and an N of 1,532. Salgado (2002) found similar results with an effect rate of -.22 and an N of 554. Barrick and Mount (1991) suggested no relationship between agreeableness and turnover with an effect rate of .09 and an N of 1,838.

Hypothesis 4: Agreeableness will be negatively related to turnover.

Conscientiousness

Conscientiousness is empirically marked by adjectives such as neat, careful, self-disciplined, and reliable and may be linked to behaviors such as punctuality, attendance, rule compliance, productive use of time, and care for organizational property (Organ, 1994). Employees who have these traits and exhibit behaviors that are consistent with conscientiousness may be more likely to garner respect, recognition, and favorable treatment within an organization possibly increasing job satisfaction (Organ, 1994). Some research, however, has indicated conscientiousness may be negatively related to job satisfaction, particularly satisfaction with coworkers (Organ & Lingl, 1992). This link between conscientiousness and satisfaction is important as researchers have suggested turnover decisions are directly influenced by an individual's job satisfaction (Mobley, 1977; Price & Mueller, 1981; Steers & Mowday, 1981). In essence, low

conscientiousness may lead to dissatisfaction, and dissatisfied individuals have thoughts of quitting, comparing their present job to perceived alternatives.

Meta-analytic results have varied widely regarding conscientiousness (see Table 1). Barrick & Mount (1991) reported an effect size of .12 with N of 2,759. Zimmerman (2008) predicted an effect size of -.20 with an N of 1,631, while Salgado (2002) reported the strongest relationship with an effect size of -.31 and an N of 748.

Hypothesis 5: Conscientiousness will be negatively related to turnover.

Positive Affect

Positive Affect is the extent to which a person generally feels enthusiastic, determined, interested, and active (Watson, Clark, and Tellegen, 1988). High degrees of positive affect have been related to increased social activity, increased frequency of pleasant events, (Tellegen, 1985; Watson & Clark; 1984; Beiser, 1974; Bradburn, 1969) increased life satisfaction, (Judge, Locke, Durham, & Kluger, 1998) and increased ability to cope with stress (McCrae & Costa, 1986). Positive affectivity overlaps with the Big Five characteristic of Extraversion, and it has been suggested they may be used as surrogates for each other (Organ, 1994; Watson & Clark, 1992). As such many of the arguments discussed concerning the relationship between extraversion and retention, such as the impacts of increased social connections and networking opportunities, may be applied to employees with high degrees of positive affect as well. As with extraversion, elements of positive affect might be expected to increase and decrease employee turnover making the overall relationship complex. The empirical relationship, like that observed between extraversion and turnover, has been inconsistent. Wright and Cropanzo (1998) tested the relationship between positive affect and turnover, reporting no relationship (r =

0, *ns*). Judge (1993) also failed to observe a significant relationship between affective disposition and turnover. Others have suggested a negative relationship. Judge, Thoresen, Pucik, and Welbourne (1999) found a significant negative relationship between positive affect and career plateaus which have been linked to military members' turnover intentions (Heilmann, Holt, & Rilovick, 2008). Given these inconsistent results, and consistent with Hypothesis 1 regarding extraversion, the following null hypothesis is posited:

Hypothesis 6: Positive Affect will not be significantly related to turnover.

Negative Affect

Negative affect is associated with feelings of distress, guilt, irritability, and nervousness (Watson, Clark, & Tellegen, 1988). In many ways, negative affect may be considered the opposite of emotional stability, and in fact neuroticism and negative affect have been suggested as acceptable surrogates for each other (Organ, 1994; Watson & Clark, 1984). As such, persons high in negative affect might be expected to experience the same challenges as those low in emotional stability, such as negative perceptions of themselves and their environment (Burke, Brief, & George, 1993; Watson, Clark, & Tellegen, 1988), higher conflict with coworkers (Organ, 1994), and insecurity about their ability to perform their job (Judge & Ilies, 2002). Some researchers have been able to positively correlate negative affect with turnover (Wright & Cropanzano, 1998). Negative affect has also been linked repeatedly to lower job satisfaction (Judge & Bono, 2001; Brief, 1998; Specter, 1997) which in turn has been linked to higher turnover (Tett & Meyer, 1993). Given these challenges associated with negative affect, and the existing literature, it is expected that high negative affect will be positively related to turnover.

Hypothesis 7: Negative Affect will be positively related to turnover.

General Self-Efficacy

General self-efficacy has been defined as "one's estimates of one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise general control over events in one's life" (Judge et al., 1997). General self-efficacy involves a belief that one is capable of executing certain behaviors or obtaining certain goals (Ormrod, 2006). Research regarding the relationship between general self-efficacy and turnover is conflicting. Individuals with high self-efficacy tend to deal more effectively with difficulties as well as to persist in the face of failure (Gist & Mitchell, 1992). High levels of general self-efficacy have been linked to higher levels of work-related performance (Stajkovic & Luthans, 1998) as well as higher levels of life and job satisfaction (Judge, & Bono, 2001; Judge, Locke, Durham, & Kluger, 1998) which in turn have been linked to lower levels of turnover (Tett & Meyer, 1993). In contrast, other research has observed a positive relationship between high self-efficacy and an employee's intention to quit (Jones, 1986). Such a relationship might be in part due to persons with low self-efficacy more readily conforming to the definitions of situations offered by others and thus more quickly socializing within an organization (Jones, 1986). Similar to higher levels of extraversion, it also stands to reason that persons with high general self-efficacy might perceive more opportunities to succeed outside their current work environment. Due to these conflicting views towards a possible relationship between general self-efficacy and turnover, it is hypothesized that no significant relationship will be observed.

Hypothesis 8: General Self-Efficacy will not be significantly related to turnover.

Summary

Many researchers have hypothesized relationships between personality and turnover, often with conflicting results. Notably, at least three meta-analyses have been performed regarding relationships between the "Big Five" and turnover. Yet, few have specifically examined military members. In light of this existing research, the following eight hypotheses have been posited for this study:

Hypothesis 1: Extraversion will not be significantly related to turnover.

Hypothesis 2: Emotional Stability will be negatively related to turnover.

Hypothesis 3: Openness to Experience will be positively related to turnover.

Hypothesis 4: Agreeableness will be negatively related to turnover.

Hypothesis 5: Conscientiousness will be negatively related to turnover.

Hypothesis 6: Positive Affect will not be significantly related to turnover.

Hypothesis 7: Negative Affect will be positively related to turnover.

Hypothesis 8: General Self-Efficacy will not be significantly related to turnover.

CHAPTER 2

METHOD

This chapter outlines the participants, procedures, and measures used to test the research hypotheses, namely, the extent to which personality correlates to retention or turnover of an Air Force officer within commissioned military service. In brief, surveys were administered to classes of United States Air Force officer candidates attending Officer Training School between the years of 1996 and 1997. These surveys measured a variety of information, including personality traits. Additional surveys were mailed to the officers one to two years after completing Officer Training School in order to measure job satisfaction and organizational commitment. In order to identify personality traits correlating to turnover or retention, follow-up research was conducted in 2009 to determine which candidates had remained with the Air Force.

Setting & Participants

As noted, data were collected from Air Force members who had completed Officer Training School. Officer Training School is a 12 week initial training course designed to test and prepare selected candidates who desire a commission as officers in the United States Air Force. The official mission of Officer Training School is to "train and commission quality officers for the United States Air Force" (http://www.au.af.mil/au/holmcenter/OTS/index.asp). Between the years of 1996 and 1997, 318 officer candidates attending Officer Training School were administered surveys. The purpose of these surveys was to identify the personality make up of the candidates using a variety of measures. Of the 318 individuals, 284 had current records to be retrieved from the Air Force Personnel Center. As no records could be retrieved for

the remaining 34 individuals, their records were removed from the sample. Of the remaining 284, 178 members had prior military service ranging from 1 to 16 years (M = 8.4 years; SD = 3.5). As these participants had often already established long-term employment with the military, and therefore were potentially influenced towards retention due to their time invested towards the 20 year military retirement plan, correlations were determined both with and without these individuals included in the sample. The participants consisted of 247 males and 37 females ranging in age from 22 to 35 years old with an average age of 27.4 years (SD = 3.1 years). All participants had previously completed at least a bachelor's degree, which is a requirement for selection to Officer Training School. All 284 candidates were identified as meeting the physical, academic, and military standards necessary to enter the Air Force as officers. Upon graduation from the 12 week program, these officers typically incurred an employment commitment to the United States Air Force of four years. Follow up surveys were administered to the officers one to two years after graduation from the program. The purpose of these follow up surveys was to measure the job satisfaction and organizational commitment of the officers. Of the 284 participants in this study, 145 (51%) responded to these surveys.

Procedure

Initial data were collected via voluntary surveys administered to members as part of their training curriculum. Survey results were confidential and participants signed an informed consent form recognizing the Officer Training School faculty would not have access to their individual responses. Follow up research was conducted in 2009 through the Air Force Personnel Center. A records review was performed to identify which

officers in the sample elected to separate from the Air Force, when these officers actually separated, and which elected to remain with the Air Force.

Measures

All surveys were administered as part of a study conducted by researchers from the University of Alabama at Birmingham and the Air Force Institute of Technology.

The big five personality traits (viz. extraversion, neuroticism, openness to experience, agreeableness, and conscientiousness) were measured using a 35 item scale. The trait variables used for each item were developed by Cattell (1947) and their validity has been extensively researched (Mount, Murray, & Strauss, 1994). The scale for each of these traits is measured using a semantic differential scale. That is, each scale included a series of eight bipolar adjectives. Each of the adjectives, such as "Adventurous" and "Cautious," anchored the opposing ends of an eight-point scale (i.e., Adventurous = 1 and Cautious = 8) and participants indicated the number that corresponded to how the adjectives best described themselves. Scale scores were computed by summing the responses participants provided to each item associated with the construct. Prior to this, those items that presented the adjectives in a negative way (i.e., lower scores were indicators of the trait) were reverse scored. Of the 35 items, 17 were negatively phrased, listing the antithesis of the measured trait on the extreme end. See Appendix A for a list of the survey items.

Extroversion. Eight items measured extroversion. An example of an adjective pair measuring extraversion was "Talkative" and "Silent." Scores could range from 8 to 64 with the scores in this sample actually ranging between 27 and 55 and a mean score of 38.3 (SD = 4.6). The Cronbach's alpha for the extroversion items of the scale was .75.

Agreeableness. Ten items measured agreeableness. An example of an adjective pair measuring agreeableness was "Suspicious" and "Trustful." Scores could range from 10 to 80 with the scores in this sample actually ranging between 14 and 55 and a mean score of 30.8 (*SD* = 4.6). The Cronbach's alpha for the agreeableness items of the scale was .73.

Conscientiousness. Five items measured conscientiousness. An example of an adjective pair measuring conscientiousness was "Responsible" and "Frivolous." Scores could range from 5 to 40 with the scores in this sample actually ranging between 8 and 30 and a mean score of 20.3 (*SD* = 3.5). The Cronbach's alpha for the conscientiousness items of the scale was .79.

Emotional stability (Neuroticism). Seven items measured emotional stability. An example of an adjective pair measuring emotional stability was "Calm" and "Emotional." Scores could range from 7 to 56 with the scores in this sample actually ranging between 18 and 47 and a mean score of 29.5 (*SD* = 4.0). The Cronbach's alpha for the emotional stability items of the scale was .73.

Openness to experience. Five items measured openness to experience. An example of an adjective pair measuring openness to experience was "Practical, Logical" and "Imaginative." Scores could range from 5 to 40 with the scores in this sample actually ranging between 17 and 39 and a mean score of 26.6 (*SD* = 4.4). The Cronbach's alpha for the openness to experience items of the scale was .75.

Positive and negative affect. Positive and negative affect were measured using a scale developed by Watson, Clark, and Tellegen (1988). The measure consists of 20 words. Ten words reflect positive affect (e.g., interested, enthusiastic, proud, determined)

and 10 reflect negative affect (e.g., distressed, scared, hostile, ashamed). Participants indicated the frequency of the emotions that they have experienced on a 5-point scale ranging from 1 = *very slightly or not at all* to 5 = *extremely*. By changing the frame of reference that participants respond to the items, researchers have been able to measure the participants' state of emotion or their emotional disposition. Because the participants' dispositional affect was the focus of this study, participants were instructed to consider a relatively long time frame by indicating the extent to which they have "felt this way during the past year." Evidence suggested that this scale provides valid, reliable, and largely independent measures of positive and negative affect regardless of the subject or the time frame and response format used (Crawford & Henry, 2004; Watson et al., 1988). Scores for negative affect ranged from 10 to 44 with a mean score of 24.0 (*SD* = 6.6). Scores for positive affect ranged from 18 to 50 with a mean score of 41.5 (*SD* = 5.2). The Cronbach's alpha was .86 for the positive affect items of the scale and 0.84 for the negative affect items of the scale. See Appendix A for a complete list of the items in the survey.

General self-efficacy. General self-efficacy was measured using a 17 item scale developed by Sherer, Maddux, Mercadante, Prentice-Dunn, Jacobs, and Rogers (1982). This is a well established and validated scale cited by more than 700 research articles (Bosscher & Smit, 1998). Example items included: "When I make plans, I am certain I can make them work." Eleven of the items are phrased negatively such as "I give up on things before completing them." Participants indicated their agreement with each statement by circling a number on a 1 to 7 Likert scale labeled "strongly disagree" to "strongly agree." After reversing the eleven negatively phrased responses, scores could

range from 17 to 119. Actual scores in this sample ranged from 38 to 84 with a mean score of 57.0 (*SD* = 7.3). The Cronbach's alpha for the general self-efficacy scale was .69. See Appendix A for a list of the survey items.

Job satisfaction. Job satisfaction was measured using a custom 5 item scale. Four items were phrased positively, such as "Overall, I am happy to be an Air Force officer." A fifth reverse scored item was phrased negatively, stating "I am dissatisfied with the work I do as an officer." Responses were scored on a 1 to 7 Likert scale labeled "strongly disagree" to "strongly agree" allowing for scores ranging from 5 to 35. Actual scores ranged from 10 to 35, with a mean score of 27.2 (*SD* = 4.6). See Appendix A for a list of the survey items.

Organizational commitment. Organizational commitment was measured using an abridgement of a 15 item scale developed by Mowday, Steers, and Porter (1979) which has been empirically studied and validated (e.g., Brooke, Russell, & Price, 1988; Lee & Mowday, 1987; Angle & Perry, 1981). The original scale includes 9 positively phrased statements such as "For me, this is the best of all possible organizations for which to work" and 6 reverse scored negatively phrased statements such as "I feel very little loyalty to this organization." The surveys administered to participants removed the 6 negatively phrased statements and included the remaining 9 positively phrased statements. Answers were scored on a 1 to 7 Likert scale labeled "strongly disagree" to "strongly agree" allowing for scores ranging from 9 to 63. Actual scores ranged from 19 to 62, with a mean score of 50.8 (*SD* = 7.3). See Appendix A for a list of the survey items.

Retention and turnover data. Data regarding the members were collected from Air Force Personnel Center records. This data was collected in 2009 and included whether the member was still in the service as well as the number of days the member had served. The number of days a member had served was used as the dependent variable for the analysis. Unlike other studies of turnover that typically code turnover as a categorical variable (i.e., 0 = left the organization, 1 = still with the organization), this made it possible whether different personality types were more likely to stay longer. In sum, the records indicated that 137 members of our sample had separated while another 147 were still on active duty (34 were eliminated because the records search did not yield any data).

Analytical Overview

Once retention and turnover data were obtained from the Air Force Personnel Center, a correlation study was performed between the two data sets. Each personality measure was compared against the length of time served in the hopes that any significant relationships observed would offer new insights to the existing turnover and retention literature. Such findings might also illuminate previously unexplored avenues warranting further investigation.

CHAPTER 3

RESULTS

Summary Statistics

A summary of the results of the analysis can be found in Table 2 and Table 3. All in all, 284 Air Force officers were examined. Of these 37 were females (13%) and 247 were males (87%). The average age of these officers while attending Officer Training School was 27.38 (*SD* = 3.126). Of the 284 officers, 167 (59%) had enlisted military experience prior to attending Officer Training School averaging 8.4 years (*SD* = 3.5 years). It should be noted the Air Force includes the twelve weeks spent attending the training as enlisted military service time, regardless of whether an officer candidate had previous enlisted service. The average enlisted service time for the sample was then 5.3 years (*M* = 1934.11 days, *SD* = 4.9 years or 1778.759 days). As of the time of this research, 139 (49%) of the sample had separated from the Air Force. At least 54 (39%) of these separators were eligible for retirement at the time they elected to terminate their employment. The average total service of separators was 14.8 years (*M* = 5422.11 days, *SD* = 7.2 years or 2627.80 days). The average total service of the entire sample was 16.7 years (*M* = 6090.15 days, *SD* = 6.1 years or 2241.407 days).

In addition to the personality measures collected, post graduate surveys were administered to and received from 145 members of the sample. These self report surveys included measures of organizational commitment and job satisfaction. While it is not the intention of this study to deeply examine the relationship between organizational commitment nor job satisfaction and turnover, the measures where retained in order to

determine the degree (if any) to which personality measures might explain turnover above and beyond organizational commitment or job satisfaction.

Table 2. Descriptive Statistics

Variable	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness Statistic	Skewness Std. Error	Kurtosis Statistic	Kurtosis Std. Error
Prior Enlisted Military Service (days)	284	94	5875	1934.11	1778.759	0.391	0.145	-1.291	0.288
Total Military Service (days)	284	501	10761	6090.15	2241.407	-0.266	0.145	-0.782	0.288
Gender	284	1	2	1.87	0.337	-2.208	0.145	2.897	0.288
Age	284	22	35	27.38	3.126	0.349	0.145	-0.783	0.288
Extraversion	283	27	55	38.29	4.593	0.291	0.145	0.787	0.289
Agreeableness	282	14	55	30.79	4.592	0.508	0.145	3.118	0.289
Conscientiousness	278	8	30	20.25	3.472	-0.231	0.146	0.625	0.291
Openness to Experience	73	17	39	26.6	4.377	0.42	0.281	0.231	0.555
Emotional Stability	276	18	47	29.51	3.996	0.251	0.147	2.087	0.292
Negative Affect	278	10	44	24.03	6.64	0.405	0.146	-0.187	0.291
Positive Affect	279	18	50	41.48	5.163	-0.745	0.146	0.978	0.291
General Self-Efficacy	271	38	84	56.99	7.263	0.472	0.148	0.846	0.295
Organizational Commitment	145	19	62	50.79	7.298	-1.28	0.201	3.251	0.4
Job Satisfaction	145	10	35	27.2	4.599	-1.406	0.201	2.393	0.4
Valid N (listwise)	35								

Tests of Hypothesis

Correlations among the number of days in service and the personality variables are presented in Table 3 along with relationships between the various personality variables. As discussed below, the military members in the sample generally scored similarly to national means in the personality measures. The variation of responses amongst the participants was promising and suggests participant response was not strongly biased towards scores which might have been viewed as "favorable."

It was hypothesized that extraversion would not be significantly related to turnover (Hypothesis 1). Measures for extraversion were retrieved for 283 of the 284 members of the sample. The average score of this military sample was 38.29 (*SD* = 4.6). This is very consistent with the national average score of 38.24 (http://bigfivepersonalitytest.com/big-five). As predicted, extraversion did not

significantly correlate to turnover, with r = -.038 (p > .05, *ns)*. This finding was consistent with Barrick and Mount (1991) who reported a relationship between extraversion and turnover of -.03 as well as Zimmerman (2008) who reported a correlation of -.04.

It was hypothesized that emotional stability would be negatively related to turnover (Hypothesis 2). Measures for Emotional Stability were retrieved for 276 of the 284 participants.

Table 3. Correlations

Variable		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Total Military Service	r	1.000	.879	.091	-.177	.038	.003	.023	.058	-.008	.088	.019	-.031	-.076	-.004	.288
(days)	p		.000	.126	.003	.521	.957	.704	.628	.889	.142	.752	.614	.366	.957	.000
	N	284	284	284	284	283	282	278	73	276	278	279	271	145	145	284
2 Prior Enlisted Military	r	.879	1.000	.091	-.111	.044	-.033	.042	.067	-.013	.091	.019	-.034	-.004	.064	-.090
Service (days)	p	.000		.126	.061	.461	.583	.486	.574	.829	.128	.750	.576	.965	.443	.129
	N	284	284	284	284	283	282	278	73	276	278	279	271	145	145	284
3 Gender	r	.091	.091	1.000	.150	.059	-.004	.016	-.163	-.158	-.079	.092	-.128	.016	.040	.003
(1=female, 2=male)	p	.126	.126		.011	.324	.951	.787	.168	.008	.188	.125	.035	.847	.637	.958
	N	284	284	284	284	283	282	278	73	276	278	279	271	145	145	284
4 Age	r	-.177	-.111	.150	1.000	.142	.047	.051	.032	.089	-.097	.088	.015	.053	-.036	-.146
	p	.003	.061	.011		.017	.429	.393	.787	.141	.105	.143	.810	.531	.668	.014
	N	284	284	284	284	283	282	278	73	276	278	279	271	145	145	284
5 Extraversion	r	.038	.044	.059	.142	1.000	.188	.212	-.126	.047	-.146	.013	-.093	-.009	.005	-.016
	p	.521	.461	.324	.017		.002	.000	.292	.438	.015	.834	.128	.912	.953	.790
	N	283	283	283	283	283	281	277	72	275	277	278	271	144	144	283
6 Agreeableness	r	.003	-.033	-.004	.047	.188	1.000	.327	-.190	.199	.016	-.152	.132	.027	-.030	.059
	p	.957	.583	.951	.429	.002		.000	.110	.001	.797	.011	.031	.752	.718	.325
	N	282	282	282	282	281	282	278	72	275	276	277	269	145	145	282
7 Conscientiousness	r	.023	.042	.016	.051	.212	.327	1.000	-.219	.189	.120	-.133	.132	.040	-.040	-.030
	p	.704	.486	.787	.393	.000	.000		.070	.002	.048	.028	.032	.637	.634	.623
	N	278	278	278	278	277	278	278	69	272	272	273	265	142	142	278
8 Openness to	r	.058	.067	-.163	.032	-.126	-.190	-.219	1.000	.009	-.097	.490	-.212	.078	.161	-.102
Experience	p	.628	.574	.168	.787	.292	.110	.070		.941	.427	.000	.081	.615	.298	.393
	N	73	73	73	73	72	72	69	73	72	69	69	69	44	44	73
9 Emotional	r	-.008	-.013	-.158	.089	.047	.199	.189	.009	1.000	.115	-.026	.086	.063	.007	-.068
Stability	p	.889	.829	.008	.141	.438	.001	.002	.941		.059	.668	.164	.459	.934	.259
	N	276	276	276	276	275	275	272	72	276	271	271	263	140	140	276
10 Negative Affect	r	.088	.091	-.079	-.097	-.146	.016	.120	-.097	.115	1.000	-.036	.330	.008	-.046	-.043
	p	.142	.128	.188	.105	.015	.797	.048	.427	.059		.555	.000	.923	.591	.479
	N	278	278	278	278	277	276	272	69	271	278	277	265	140	140	278
11 Positive Affect	r	.019	.019	.092	.088	.013	-.152	-.133	.490	-.026	-.036	1.000	-.318	.272	.115	-.034
	p	.752	.750	.125	.143	.834	.011	.028	.000	.668	.555		.000	.001	.174	.576
	N	279	279	279	279	278	277	273	69	271	277	279	267	141	141	279
12 General Self-Efficacy	r	-.031	-.034	-.128	.015	-.093	.132	.132	-.212	.086	.330	-.318	1.000	-.030	-.023	.030
	p	.614	.576	.035	.810	.128	.031	.032	.081	.164	.000	.000		.724	.790	.622
	N	271	271	271	271	271	269	265	69	263	265	267	271	138	138	271
13 Organizational	r	-.076	-.004	.016	.053	-.009	.027	.040	.078	.063	.008	.272	-.030	1.000	.673	-.157
Commitment	p	.366	.965	.847	.531	.912	.752	.637	.615	.459	.923	.001	.724		.000	.059
	N	145	145	145	145	144	145	142	44	140	140	141	138	145	145	145
14 Job Satisfaction	r	-.004	.064	.040	-.036	.005	-.030	-.040	.161	.007	-.046	.115	-.023	.673	1.000	-.119
	p	.957	.443	.637	.668	.953	.718	.634	.298	.934	.591	.174	.790	.000		.153
	N	145	145	145	145	144	145	142	44	140	140	141	138	145	145	145
15 Active Duty	r	.288	-.090	.003	-.146	-.016	.059	-.030	-.102	-.068	-.043	-.034	.030	-.157	-.119	1.000
(0=no; separated)	p	.000	.129	.958	.014	.790	.325	.623	.393	.259	.479	.576	.622	.059	.153	
(1=yes; retained)	N	284	284	284	284	283	282	278	73	276	278	279	271	145	145	284

The average score was 29.51 (*SD* = 4.0). This is somewhat less than the national average score of 32.48 (http://bigfivepersonalitytest.com/big-five). Inconsistent with the hypothesis, results indicated that emotional stability was not significantly correlated to turnover ($r = .008$, $p > .05$, *ns*). This finding, however, was consistent with the Barrick and Mount (1991) value of .02.

Openness to experience was hypothesized to be positively related to turnover (Hypothesis 3). Only 73 of the 284 participants reported their openness to experience. The average score was 26.60 (*SD* = 4.4). This is slightly more than the national average score of 24.95 (http://bigfivepersonalitytest.com/big-five). Results did not support the hypothesized relationship; Openness to experience was not significantly correlated to turnover. The correlation was -.058 ($p>.05$, *ns*). Barrick and Mount (1991) also observed no significant relationship between openness to experience and turnover, with a value of -.11 as did Salgado (2002) with a value of -.14.

Like openness to experience, it was hypothesized that agreeableness would be negatively related to turnover (Hypothesis 4). Measures for agreeableness were retrieved for 282 of the 284 members of the sample. The average score was 30.79 (*SD* = 4.6). This is significantly less than the national average score of 39.4 (http://bigfivepersonalitytest.com/big-five). Contrary to the hypothesis, agreeableness did not significantly relate to turnover, with a correlation of -.003 ($p>.05$, *ns*). Barrick and Mount (1991) also observed no significant relationship with a value of .09.

Conscientiousness was hypothesized to be negatively related to turnover (Hypothesis 5). Measures for conscientiousness were retrieved for 278 of the 284 members of the sample with an average score of 20.25 (*SD* = 3.5). This is somewhat

more than the national average score of 18.78 (http://bigfivepersonalitytest.com/big-five). Conscientiousness did not significantly relate to turnover, with a correlation of -.023 ($p>.05$, *ns*).

It was hypothesized positive affect would not be significantly related to turnover (Hypothesis 6). Measures for positive affect were retrieved for 279 of the 284 participants. The average score was 21.48 ($SD = 5.2$). Consistent with the hypothesis, positive affect did not significantly correlate to turnover, with an effect size = -.019.

It was hypothesized negative affect would be positively related to turnover (Hypothesis 7). Measures for negative affect were retrieved for 278 of the 284 members of the sample. Of these, the average score was 24.03 ($SD = 6.6$). Contrary to the hypothesis, negative affect was found to have no significant relationship to turnover. The correlation between negative affect and turnover was -.088 ($p>.05$, *ns*).

Finally, it was hypothesized that general self-efficacy would not be significantly related to turnover (Hypothesis 8). Measures for General Self-Efficacy were retrieved for 271 of the 284 members of the sample. The average score of these participants was 56.99 ($SD = 7.3$). Consistent with the hypothesis, general self-efficacy did not significantly correlate to turnover, with a correlation of .031 ($p>.05$, *ns*).

In short, within the given sample of Air Force officers, personality measures appeared to be independent of turnover decisions. Contrary to several of the given hypotheses, none of the personality measures examined in this study (extraversion, agreeableness, conscientiousness, openness to experience, emotional stability, positive affect, negative affect, or general self-efficacy) were found to have any significant relationship with turnover.

Additional Analysis

In addition to the primary analysis, the sample was divided in several ways to examine whether there were other meaningful differences within the group members. While the results remain consistent with the primary analysis (i.e., no significant relationships were identified) some key subsets of the sample are included and discussed here in the interest of completeness.

Removal of Current Employees

One criticism of Barrick and Mount's (1991) analysis made by Zimmerman (2008) is that the prior study included participants which were still currently employed by their organizations. Such employees might turnover within days, or remain with their organization for many more years. Because the overall time in service of these employees remains in question, Zimmerman argued they should be removed from the analysis. Moreover, using the number of days in service as a variable mitigated this issue. Still, in following with this logic, correlations were computed after removing the 52% of participants which remained employed with the Air Force at the time of this research. Consistent with the primary analysis, there were no significant correlations between personality and turnover within the remaining 48% of participants, though the correlation values did generally show a small increase. The specific correlation values (summarized in Table 4), are as follows: extraversion r = -.151, agreeableness r = -.073, conscientiousness r = -.070, openness to experience r = -.082, emotional stability r = -.041, positive affect r = -.014, negative affect r = -.130, and general self-efficacy r = .106. Note that for all the correlations, p remained greater than .05 (*ns*).

Removal of Prior-Enlisted Air Force Participants

An unusual aspect of this sample of military members as compared to employees within many civilian institutions is the distinction between participants with prior enlisted military service and participants entering with no previous military service. Similar to other military services, the Air Force divides its workforce into an officer and enlisted core. In general, the officer core might be considered to primarily perform a leadership and management role within the organization. Participants with previous enlisted work experience may likely have been exposed to the job requirements of officers and thus entered with more accurate expectations of their future work experience than participants which had not previously worked within the military. Furthermore, the tenure of the participants with previous enlisted work experience was substantial (average 8.4 years, *SD* = 3.5 years). This previous tenure is included in determining a military member's eligibility to retire at 20 years. As such, an argument could be made that prior enlisted military officers would be more inclined than new military officers to remain within the organization until they are eligible to retire. Analysis was then conducted after removing the 62% of the sample with prior enlisted military experience which might be arguably biased towards retention. Consistent with the primary analysis, the remaining 38% of participants demonstrated no relationship between any of their personality measures and turnover. The specific correlations can be found in Table 5, and are as follows: extraversion r = -.034, agreeableness r = -.179, conscientiousness r = .024, openness to experience r = .114, emotional stability r = -.058, positive affect r = .075, negative affect r = -.079, and general self-efficacy r = -.047. Again, for each measure the p values remained greater than .05 (*ns*).

Removal of Current Employees and Prior-Enlisted Air Force Participants

In keeping with the logic of the previous two sections, analysis was also performed after removing both currently employed participants, and prior-enlisted participants from the sample. Consistent with the previous analyses, no significant relationships between personality and turnover were found in the remaining 19% of participants. The specific correlations can be found in Table 6, and are as follows: extraversion r = .099, agreeableness r = -.030, conscientiousness r = .124, openness to experience r = -.101, emotional stability r = -.295, positive affect r = .064, negative affect r = -.210, or general self-efficacy r = -.158. Again, the p values for each relationship were greater than .05 (*ns*).

Job Satisfaction and Organizational Commitment

As discussed previously, job satisfaction and organizational commitment measures were also included in the analysis with the intention that these relationships might be used as controls between the measured personality factors and turnover. Surprisingly, neither job satisfaction nor organizational commitment significantly correlated to turnover in the analysis. As the items for the job satisfaction scale have not been validated by previous studies, this may be due to the job satisfaction scale not actually measuring true job satisfaction. However, as the organizational commitment items were taken from an abridged version of the validated scale developed by Mowdays, Steers & Porter (1979), a relationship with turnover would have been expected.

Table 4. Correlations for Separated Participants

Variable		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Total Military Service	r	1.000	.937	.146	-.195	.151	.073	.070	.082	.041	.130	.014	-.106	-.074	.035
(days)	p		.000	.088	.022	.078	.401	.424	.626	.636	.137	.873	.226	.501	.750
	N	137	137	137	137	137	136	134	38	133	132	132	132	85	85
2 Prior Enlisted Military	r	.937	1.000	.154	-.176	.173	.075	.092	.023	-.008	.099	-.021	-.106	-.053	.083
Service (days)	p	.000		.073	.040	.044	.383	.288	.893	.927	.257	.815	.228	.631	.450
	N	137	137	137	137	137	136	134	38	133	132	132	132	85	85
3 Gender	r	.146	.154	1.000	.180	.071	.006	.029	-.287	-.151	-.023	.128	-.152	-.016	.051
(1=female, 2=male)	p	.088	.073		.035	.412	.948	.743	.081	.083	.791	.144	.081	.884	.646
	N	137	137	137	137	137	136	134	38	133	132	132	132	85	85
4 Age	r	-.195	-.176	.180	1.000	.115	-.098	-.014	-.047	.017	-.145	.116	.001	.016	-.054
	p	.022	.040	.035		.180	.256	.871	.779	.846	.098	.185	.993	.882	.626
	N	137	137	137	137	137	136	134	38	133	132	132	132	85	85
5 Extraversion	r	.151	.173	.071	.115	1.000	.137	.174	-.262	.127	-.179	.076	-.163	-.026	.011
	p	.078	.044	.412	.180		.111	.044	.112	.146	.040	.387	.062	.814	.919
	N	137	137	137	137	137	136	134	38	133	132	132	132	85	85
6 Agreeableness	r	.073	.075	.006	-.098	.137	1.000	.332	-.096	.090	.046	-.160	.198	.139	.092
	p	.401	.383	.948	.256	.111		.000	.571	.304	.606	.069	.023	.206	.402
	N	136	136	136	136	136	136	134	37	132	131	131	131	85	85
7 Conscientiousness	r	.070	.092	.029	-.014	.174	.332	1.000	-.175	.160	.027	-.061	.236	.165	-.013
	p	.424	.288	.743	.871	.044	.000		.307	.068	.760	.495	.007	.136	.905
	N	134	134	134	134	134	134	134	36	131	129	129	129	83	83
8 Openness to	r	.082	.023	-.287	-.047	-.262	-.096	-.175	1.000	.061	-.222	.520	-.336	.350	.446
Experience	p	.626	.893	.081	.779	.112	.571	.307		.715	.200	.002	.042	.074	.020
	N	38	38	38	38	38	37	36	38	38	35	34	37	27	27
9 Emotional	r	.041	-.008	-.151	.017	.127	.090	.160	.061	1.000	.164	-.022	.057	.023	.090
Stability	p	.636	.927	.083	.846	.146	.304	.068	.715		.065	.809	.524	.842	.426
	N	133	133	133	133	133	132	131	38	133	128	128	128	81	81
10 Negative Affect	r	.130	.099	-.023	-.145	-.179	.046	.027	-.222	.164	1.000	-.053	.359	-.037	-.107
	p	.137	.257	.791	.098	.040	.606	.760	.200	.065		.545	.000	.740	.342
	N	132	132	132	132	132	131	129	35	128	132	131	127	81	81
11 Positive Affect	r	.014	-.021	.128	.116	.076	-.160	-.061	.520	-.022	-.053	1.000	-.273	.111	.030
	p	.873	.815	.144	.185	.387	.069	.495	.002	.809	.545		.002	.325	.790
	N	132	132	132	132	132	131	129	34	128	131	132	128	81	81
12 General Self-Efficacy	r	-.106	-.106	-.152	.001	-.163	.198	.236	-.336	.057	.359	-.273	1.000	-.033	-.050
	p	.226	.228	.081	.993	.062	.023	.007	.042	.524	.000	.002		.765	.652
	N	132	132	132	132	132	131	129	37	128	127	128	132	83	83
13 Organizational	r	-.074	-.053	-.016	.016	-.026	.139	.165	.350	.023	-.037	.111	-.033	1.000	.714
Commitment	p	.501	.631	.884	.882	.814	.206	.136	.074	.842	.740	.325	.765		.000
	N	85	85	85	85	85	85	83	27	81	81	81	83	85	85
14 Job Satisfaction	r	.035	.083	.051	-.054	.011	.092	-.013	.446	.090	-.107	.030	-.050	.714	1.000
	p	.750	.450	.646	.626	.919	.402	.905	.020	.426	.342	.790	.652	.000	
	N	85	85	85	85	85	85	83	27	81	81	81	83	85	85

Table 5. Correlations for Participants with no Prior Military Service

Variable		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Total Military Service	r	1.000	.111	.037	-.177	.034	.179	-.024	-.114	.058	.079	-.075	.047	-.246	-.143	.823
(days)	p		.254	.701	.066	.729	.064	.807	.579	.556	.424	.445	.637	.065	.289	.000
	N	108	108	108	108	108	108	107	26	106	104	105	102	57	57	108
2 Prior Enlisted Military	r	.111	1.000	-.205	-.088	-.033	.085	-.121	-.153	-.030	-.010	.109	-.119	.058	-.032	.015
Service (days)	p	.254		.033	.363	.733	.380	.216	.457	.763	.922	.268	.233	.669	.811	.877
	N	108	108	108	108	108	108	107	26	106	104	105	102	57	57	108
3 Gender	r	.037	-.205	1.000	.096	.016	-.033	.072	-.308	-.147	-.031	.046	-.141	.272	.110	.105
(1=female, 2=male)	p	.701	.033		.324	.869	.731	.462	.126	.134	.755	.640	.156	.041	.414	.282
	N	108	108	108	108	108	108	107	26	106	104	105	102	57	57	108
4 Age	r	-.177	-.088	.096	1.000	.233	.029	.183	-.022	.158	-.043	.073	-.047	.097	-.116	-.189
	p	.066	.363	.324		.015	.764	.059	.917	.105	.662	.462	.641	.474	.391	.050
	N	108	108	108	108	108	108	107	26	106	104	105	102	57	57	108
5 Extraversion	r	.034	-.033	.016	.233	1.000	.210	.266	-.264	.124	-.022	.152	-.030	-.112	-.173	.097
	p	.729	.733	.869	.015		.029	.006	.192	.204	.824	.121	.767	.407	.199	.319
	N	108	108	108	108	108	108	107	26	106	104	105	102	57	57	108
6 Agreeableness	r	.179	.085	-.033	.029	.210	1.000	.295	-.133	.158	.076	.008	.121	-.019	-.185	.201
	p	.064	.380	.731	.764	.029		.002	.518	.105	.443	.938	.225	.890	.168	.037
	N	108	108	108	108	108	108	107	26	106	104	105	102	57	57	108
7 Conscientiousness	r	-.024	-.121	.072	.183	.266	.295	1.000	-.265	.272	.181	-.101	.266	-.015	-.138	.032
	p	.807	.216	.462	.059	.006	.002		.191	.005	.067	.308	.007	.912	.309	.743
	N	107	107	107	107	107	107	107	26	106	103	104	101	56	56	107
8 Openness to	r	-.114	-.153	-.308	-.022	-.264	-.133	-.265	1.000	-.146	-.224	.309	-.289	.399	.464	-.204
Experience	p	.579	.457	.126	.917	.192	.518	.191		.478	.305	.152	.160	.157	.095	.318
	N	26	26	26	26	26	26	26	26	26	23	23	25	14	14	26
9 Emotional	r	.058	-.030	-.147	.158	.124	.158	.272	-.146	1.000	.234	-.161	.069	.033	-.106	-.069
Stability	p	.556	.763	.134	.105	.204	.105	.005	.478		.018	.105	.498	.812	.436	.485
	N	106	106	106	106	106	106	106	26	106	102	103	100	56	56	106
10 Negative Affect	r	.079	-.010	-.031	-.043	-.022	.076	.181	-.224	.234	1.000	.011	.372	.184	-.013	.000
	p	.424	.922	.755	.662	.824	.443	.067	.305	.018		.912	.000	.182	.928	1.000
	N	104	104	104	104	104	104	103	23	102	104	104	98	54	54	104
11 Positive Affect	r	-.075	.109	.046	.073	.152	.008	-.101	.309	-.161	.011	1.000	-.190	.336	.381	-.058
	p	.445	.268	.640	.462	.121	.938	.308	.152	.105	.912		.060	.012	.004	.554
	N	105	105	105	105	105	105	104	23	103	104	105	99	55	55	105
12 General Self-Efficacy	r	.047	-.119	-.141	-.047	-.030	.121	.266	-.289	.069	.372	-.190	1.000	-.024	-.109	-.029
	p	.637	.233	.156	.641	.767	.225	.007	.160	.498	.000	.060		.861	.434	.776
	N	102	102	102	102	102	102	101	25	100	98	99	102	54	54	102
13 Organizational	r	-.246	.058	.272	.097	-.112	-.019	-.015	.399	.033	.184	.336	-.024	1.000	.591	-.250
Commitment	p	.065	.669	.041	.474	.407	.890	.912	.157	.812	.182	.012	.861		.000	.061
	N	57	57	57	57	57	57	56	14	56	54	55	54	57	57	57
14 Job Satisfaction	r	-.143	-.032	.110	-.116	-.173	-.185	-.138	.464	-.106	-.013	.381	-.109	.591	1.000	-.139
	p	.289	.811	.414	.391	.199	.168	.309	.095	.436	.928	.004	.434	.000		.304
	N	57	57	57	57	57	57	56	14	56	54	55	54	57	57	57
15 Active Duty	r	.823	.015	.105	-.189	.097	.201	.032	-.204	-.069	.000	-.058	-.029	-.250	-.139	1.000
(0=no; separated)	p	.000	.877	.282	.050	.319	.037	.743	.318	.485	1.000	.554	.776	.061	.304	
(1=yes; retained)	N	108	108	108	108	108	108	107	26	106	104	105	102	57	57	108

Table 6. Correlations for Separated Participants with no Prior Military Experience

Variable		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Total Military Service (days)	r	1.000	.239	-.095	-.043	-.099	.030	-.124	.101	.295	.210	-.064	.158	-.105	-.066
	p		.076	.488	.752	.470	.826	.365	.720	.029	.135	.650	.257	.537	.699
	N	56	56	56	56	56	56	55	15	55	52	53	53	37	37
2 Prior Enlisted Military Service (days)	r	.239	1.000	.139	-.012	-.059	.100	.089	-.175	-.151	-.069	.063	-.063	.183	-.071
	p	.076		.306	.933	.665	.461	.519	.532	.270	.629	.655	.655	.278	.675
	N	56	56	56	56	56	56	55	15	55	52	53	53	37	37
3 Gender (1=female, 2=male)	r	-.095	.139	1.000	.173	-.034	.006	.094	-.232	-.116	-.083	.122	-.175	.218	.192
	p	.488	.306		.201	.804	.965	.493	.406	.398	.558	.386	.209	.196	.254
	N	56	56	56	56	56	56	55	15	55	52	53	53	37	37
4 Age	r	-.043	-.012	.173	1.000	.211	-.077	.179	-.076	.147	-.149	.129	-.207	.072	-.094
	p	.752	.933	.201		.118	.571	.190	.788	.284	.293	.357	.136	.672	.578
	N	56	56	56	56	56	56	55	15	55	52	53	53	37	37
5 Extraversion	r	-.099	-.059	-.034	.211	1.000	.061	.219	-.249	.194	.029	.135	.087	-.226	-.187
	p	.470	.665	.804	.118		.657	.108	.370	.156	.839	.336	.535	.179	.269
	N	56	56	56	56	56	56	55	15	55	52	53	53	37	37
6 Agreeableness	r	.030	.100	.006	-.077	.061	1.000	.249	-.169	-.083	.108	.001	.288	.076	-.058
	p	.826	.461	.965	.571	.657		.066	.546	.547	.444	.992	.037	.655	.733
	N	56	56	56	56	56	56	55	15	55	52	53	53	37	37
7 Conscientiousness	r	-.124	.089	.094	.179	.219	.249	1.000	-.452	.125	.091	-.041	.319	.079	-.140
	p	.365	.519	.493	.190	.108	.066		.091	.364	.526	.774	.021	.645	.414
	N	55	55	55	55	55	55	55	15	55	51	52	52	36	36
8 Openness to Experience	r	.101	-.175	-.232	-.076	-.249	-.169	-.452	1.000	-.271	-.610	.574	-.430	.447	.555
	p	.720	.532	.406	.788	.370	.546	.091		.329	.035	.051	.109	.169	.077
	N	15	15	15	15	15	15	15	15	15	12	12	15	11	11
9 Emotional Stability	r	.295	-.151	-.116	.147	.194	-.083	.125	-.271	1.000	.298	-.226	.010	-.173	-.069
	p	.029	.270	.398	.284	.156	.547	.364	.329		.034	.106	.942	.313	.690
	N	55	55	55	55	55	55	55	15	55	51	52	52	36	36
10 Negative Affect	r	.210	-.069	-.083	-.149	.029	.108	.091	-.610	.298	1.000	-.039	.439	.090	-.099
	p	.135	.629	.558	.293	.839	.444	.526	.035	.034		.786	.002	.612	.578
	N	52	52	52	52	52	52	51	12	51	52	52	49	34	34
11 Positive Affect	r	-.064	.063	.122	.129	.135	.001	-.041	.574	-.226	-.039	1.000	-.260	.298	.350
	p	.650	.655	.386	.357	.336	.992	.774	.051	.106	.786		.068	.082	.039
	N	53	53	53	53	53	53	52	12	52	52	53	50	35	35
12 General Self-Efficacy	r	.158	-.063	-.175	-.207	.087	.288	.319	-.430	.010	.439	-.260	1.000	-.133	-.267
	p	.257	.655	.209	.136	.535	.037	.021	.109	.942	.002	.068		.439	.115
	N	53	53	53	53	53	53	52	15	52	49	50	53	36	36
13 Organizational Commitment	r	-.105	.183	.218	.072	-.226	.076	.079	.447	-.173	.090	.298	-.133	1.000	.674
	p	.537	.278	.196	.672	.179	.655	.645	.169	.313	.612	.082	.439		.000
	N	37	37	37	37	37	37	36	11	36	34	35	36	37	37
14 Job Satisfaction	r	-.066	-.071	.192	-.094	-.187	-.058	-.140	.555	-.069	-.099	.350	-.267	.674	1.000
	p	.699	.675	.254	.578	.269	.733	.414	.077	.690	.578	.039	.115	.000	
	N	37	37	37	37	37	37	36	11	36	34	35	36	37	37

CHAPTER IV

DISCUSSION

Summary

This study examined the extent to which the "Big Five" (viz. extraversion, neuroticism, openness to experience, agreeableness, and conscientiousness) was linked to military members' early and longer term retention. It is grounded in the theoretical studies that have linked occupational selection to personality factors (Judge, Higgins, Thoresen, & Barrick, 1999) and was intended to provide insights into current turnover and retention literature that has examined military contexts.

In sum, the data indicated that personality dimension was not related to individuals' tenure. These findings were consistent with several null hypotheses that were posited due to the conflicting findings reported in the literature (Judge & Bono, 2001; Judge, Thoresen, Pucik, & Welbourne, 1999; Wright & Cropanzo, 1998; Tett & Meyer, 1993; Jones, 1986). For instance, Hypothesis 1 suggested that extraversion was not significantly correlated with actual turnover amongst participants which was consistent with that of previous researchers (Zimmerman, 2008; Barrick & Mount, 1991). Indeed the data supported this hypothesis. Similarly, Hypotheses 6 and 8 suggested that neither positive affect nor general self-efficacy were significantly correlated with actual turnover amongst participants. These two hypotheses were also supported. It should be noted these hypotheses were posited as a result of conflicting findings in previous research.

Contrary to the hypotheses, emotional stability, agreeableness, and conscientiousness were not related to turnover in expected ways. More specifically,

Hypotheses 2, 4, and 5 suggested that emotional stability, agreeableness, and conscientiousness would be negatively related to turnover; instead the analysis demonstrated that there were no significant relationships. This finding was not completely misaligned with previous research that has produced similar results (Barrick & Mount, 1991). Still, others have reported findings consistent with the hypotheses (Zimmerman, 2008; Salgado, 2002). Similarly, openness to experience and negative affect were not found to be positively related to turnover as expected with Hypothesis 3 and Hypothesis 7, instead results showed no significant relationships. These results, however, are inconsistent with previous findings (Zimmerman, 2008; Wright & Cropanzano, 1998). In short, none of the personality traits measured in this study significantly correlated with actual turnover amongst United States Air Force officer participants.

Theoretical and Practical Implications

In attempting to understand the various characteristics of an Air Force officer which might hold a relationship with turnover, it appears the personality traits measured in this study (i.e. the "Big Five", positive and negative affect, and general self-efficacy) are not significant players. Other considerations may very well exist which would serve as better predictors of retention and turnover. For example, it has been suggested applicant measures such as *change acceptance* (Wanberg & Banas, 2000), *interpersonal citizenship behavior* (Mossholder, Settoon, & Henagan, 2005), *need for autonomy* (Mowday, Porter & Stone, 1978), and aspiration for promotion (Greenhaus, Collins, Singh, & Parasuraman, 2002) might serve as turnover predictors.

Limitations and Future Research

One limitation of this study is the specificity of the participants examined. While no relationship between personality and turnover were observed for this sample, perhaps results would differ if the participants included a broader range of careers (compared to strictly looking at Air Force officers). Separation from military service differs from separating from many other careers in that members have contractual obligations to serve for set periods of time. Moreover, these contracted obligations change over time as members fulfill certain roles (i.e., move from base to base) and acquire certain training or educational benefits (i.e., a commitment is incurred when a member is sponsored for a Master's degree). It could be hypothesized that restriction to only certain increments of time in which voluntarily turnover is allowed might mitigate potentially impulsive terminations of employment. By reducing impulsive decisions, and the ties between turnover and certain personality types (if such ties existed) turnover decision making factors might shift to more strongly favor other considerations such as work-family conflict or perception of alternative job opportunities. For example, research has suggested a negative relationship exists between *orderliness*, a component of *conscientiousness*, and *dysfunctional impulsivity* (Dickman, 1990). Future research might examine if this unusual aspect of limited separation opportunities that come with military service obligations is a factor by increasing the sample to include participants employed by various civilian organizations.

Furthermore this sample examined only a subset of Air Force officers, namely those which commissioned through Officer Training School. Other commissioning sources, such as the Reserve Officer Training Corps (ROTC) and the United States Air

Force Academy offer alternative avenues for hiring Air Force officers. Unlike Officer Training School, these two commissioning sources financially incentivize new hires by offering education opportunities for undergraduate degrees prior to hiring. To this regard there may be other measurable turnover indicators across the Air Force which could not be identified within the specific sample used for this study.

On the opposite side of the spectrum, a second limitation of this study is that the participants may not have been specific enough. The career fields of the Air Force participants examined in this study varied widely. Participants likely included pilots, engineers, scientists, and maintenance career field officers among others. While many of the leadership and management aspects of military officership apply broadly across career fields, it could be hypothesized, for example, that the personality make up favorable for employment as a pilot differs from the personality make up favorable for employment as a scientist. For example, it has been suggested pilots rate lower than average in both neuroticism and openness to experience (Grice & Katz, 2006). In this regard, one might expect ties between personality and turnover to differ amongst differing career fields, rather than apply generally towards all. Future research might examine larger numbers of specific career fields within Air Force officers to determine if such relationships between personality and turnover exist for any given career field, rather than aggregately looking at Air Force officers in general, as this research has done.

Third, this research was mildly limited in that it used a combination of second hand data and data collected from Air Force personnel records. While this empowered the research to be able to examine real turnover documented over twelve years of time, the personality measures collected were relatively old and collected by previous

researchers. Moreover, the individual level data for the personality measures were not available in the data set. This meant the factor structure of the instrument could not be tested. While the measure of personality has been widely used and should be valid, there were several anomalies in the data that appear somewhat troubling. For instance, there were no significant relationships observed among the dispositional variables. Fortunately, several notes and original documents were available to confirm the collected data. Nevertheless, I feel it would have been ideal if the same researchers would have been available to follow the study from start to finish.

Conclusion

None of the personality measures examined in this study (*viz*. extraversion, emotional stability, openness to experience, agreeableness, conscientiousness, positive affect, negative affect, and general self-efficacy) significantly correlated to observed turnover in Air Force officers. While the appeal of identifying applicant measures useful as predictors for turnover remains great, it is not recommended that these personality measures be used as criterion for further research in the area of improving Air Force retention due to the insignificance of the correlations examined.

APPENDIX A

SUMMARY OF ITEMS FROM PERSONALITY TRAIT SCALES

Summary Table of Scales Administered

THE BIG FIVE PERSONALITY TRAITS

- Extroversion (8 items, α = .75)
- Agreeableness (10 items, α = .73)
- Conscientiousness (5 items, α = .79)
- Emotional stability (7 items, α = .73)
- Openness to experience (5 items, α = .75)

POSITIVE AND NEGATIVE AFFECT

- Positive affect (10 items, α = .86)
- Negative affect (10 items, α = .84)

GENERAL SELF EFFICACY (17 items, α = .69)

Variable & items from the Big Five Personality Traits (Total = 35 items)		
Test #		
Extroversion		
α = .75		
1	Talkative…Silent	(R)
2	Secretive…Frank	
3	Adventurous…Cautious	(R)
4	Submissive…Assertive	
5	Sociable…Self-Contained	(R)
6	Languid, Slow…Energetic	
7	Composed…Shy, Bashful	(R)
8	Depressed…Cheerful	
Agreeableness		
α = .73		
9	Good-Natured…Spiteful	(R)
10	Jealous…Not So Jealous	
11	Emotionally-Mature…Demanding	(R)
12	Self-Willed…Mild	
13	Cooperative…Obstructive	(R)
14	Suspicious…Trustful	
15	Adaptable…Rigid	(R)
16	Hard, Stern…Kindly	
17	Attentive to People…Cool, Aloof	(R)
18	Self-Sufficient…Attention-Getting	
Conscientiousness		
α = .79		
19	Relaxed, Indolent…Insistently Orderly	
20	Responsible…Frivolous	(R)
21	Unscrupulous…Conscientious	
22	Persevering…Quitting	(R)
23	Unconventional…Conventional	
Emotional Stability		
α = .73		
24	Not So Neurotic…Neurotic	(R)
25	Worrying, Anxious…Placid	
26	Poised, Tough…Easily Upset	(R)
27	Hypochondriacal…Not So Hypochondriacal	
28	Calm…Emotional	(R)
29	Changeable…Emotionally Stable	
30	Self-Sufficient…Dependent	(R)
Openness to Experience		
α = .75		
31	Boorish…Intellectual, Cultured	
32	Aesthetically Fastidious…Lacking Artistic Feeling	(R)
33	Practical, Logical…Imaginative	
34	Polished…Clumsy, Awkward	(R)
35	Immature…Independent-Minded	

Variable & items from Positive and Negative Affect (Total = 20 items)

Test #

Positive Affect. Measures the extent to which respondents are disposed to feel enthusiastic, active, and alert. High scores indicate higher levels of energy, full concentration, and pleasurable engagement.

α = .86

1	interested
3	excited
5	strong
9	enthusiastic
10	proud
12	alert
14	inspired
16	determined
17	attentive
19	active

Negative Affect. Measures the extent to which respondents are disposed to feel a variety of adverse mood states including anger, contempt, disgust, fear, and nervousness. High scores indicate general levels of distress.

α = .84

2	distressed
4	upset
6	guilty
7	scared
8	hostile
11	irritable
13	ashamed
15	nervous
18	jittery
20	afraid

Variable & items from General Self-Efficacy (Total = 17 items)

Test #

α = .69

1	When I make plans, I am certain I can make them work	
2	One of my problems is that I cannot get down to work when I should	(R)
3	If I can't do a job the first time, I keep trying until I can	
4	When I set important goals for myself, I rarely achieve them.	(R)
5	I give up on things before completing them.	(R)
6	I avoid facing difficulties.	(R)
7	If something looks too complicated, I will not even bother to try it.	(R)
8	When I have something unpleasant to do, I stick to it until I finish it.	
9	When I decide to do something, I go right to work on it.	
10	When trying to learn something new, I soon give up if I am not initially successful.	(R)
11	When unexpected problems occur, I don't handle them well.	(R)
12	I avoid trying to learn new things when they look too difficult for me.	(R)
13	Failure just makes me try harder.	
14	I feel insecure about my ability to do things.	(R)
15	I am a self-reliant person.	
16	I give up easily.	(R)
17	I do not seem capable of dealing with most problems that come up in life.	(R)

Variable & items from Organizational Commitment (Total = 9 items)	
Test #	
1	The Air Force really inspires the very best in me in the way of job performance.
2	I talk up the Air Force to my friends as a great organization to work for.
3	I would accept almost any kind of job assignment in order to keep working for the Air Force.
4	I find that my values and the Air Force's values are very similar.
5	I am proud to tell others that I am part of the Air Force.
6	I am extremely glad that I chose the Air Force to work for over jobs I was considering at the time I joined.
7	For me, this is the best of all possible organizations for which to work.
8	I am willing to put in a great deal of effort beyond that normally expected in order to help the Air Force be successful.
9	I really care about the fate of the Air Force.

Variable & items for Job Satisfaction (Total = 5 items)		
Test #		
1	I am very pleased with the kind of work I do as an officer.	
2	The people I work with as an officer are very pleasant.	
3	As an officer, I work in some very nice places.	
4	I am dissatisfied with the work I do as an officer.	(R)
5	Overall, I am happy to be an Air Force officer.	

APPENDIX B

SUMMARY OF ANALYSIS

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
prior	284	94	5875	1934.11	1778.759	.391	.145	-1.291	.288
total	284	501	10761	6090.15	2241.407	-.266	.145	-.782	.288
gender	284	1	2	1.87	.337	-2.208	.145	2.897	.288
age	284	22	35	27.38	3.126	.349	.145	-.783	.288
extraver	283	27	55	38.29	4.593	.291	.145	.787	.289
agree	282	14	55	30.79	4.592	.508	.145	3.118	.289
conscien	278	8	30	20.25	3.472	-.231	.146	.625	.291
openness	73	17	39	26.60	4.377	.420	.281	.231	.555
emostabl	276	18	47	29.51	3.996	.251	.147	2.087	.292
NA	278	10	44	24.03	6.640	.405	.146	-.187	.291
PA	279	18	50	41.48	5.163	-.745	.146	.978	.291
GSE	271	38	84	56.99	7.263	.472	.148	.846	.295
orgcommit	145	19	62	50.79	7.298	-1.280	.201	3.251	.400
jobsat	145	10	35	27.20	4.599	-1.406	.201	2.393	.400
Valid N (listwise)	35								

Correlations

		total	prior	gender	age	extraver	agree	conscien	openness	emostabl	NA	PA	GSE	orgcommit	jobsat
total	Pearson Correlation	1.000	.879**	.091	-.177**	.038	.003	.023	.058	-.008	.088	.019	-.031	-.076	-.004
	Sig. (2-tailed)		.000	.126	.003	.521	.957	.704	.628	.889	.142	.752	.614	.366	.957
	N	284	284	284	284	283	282	278	73	276	278	279	271	145	145
prior	Pearson Correlation	.879**	1.000	.091	-.111	.044	-.033	.042	.067	-.013	.091	.019	-.034	-.004	.064
	Sig. (2-tailed)	.000		.126	.061	.461	.583	.486	.574	.829	.128	.750	.576	.965	.443
	N	284	284	284	284	283	282	278	73	276	278	279	271	145	145
gender	Pearson Correlation	.091	.091	1.000	.150*	.059	-.004	.016	-.163	-.158**	-.079	.092	-.128*	.016	.040
	Sig. (2-tailed)	.126	.126		.011	.324	.951	.787	.168	.008	.188	.125	.035	.847	.637
	N	284	284	284	284	283	282	278	73	276	278	279	271	145	145
age	Pearson Correlation	-.177**	-.111	.150*	1.000	.142*	.047	.051	.032	.089	-.097	.088	.015	.053	-.036
	Sig. (2-tailed)	.003	.061	.011		.017	.429	.393	.787	.141	.105	.143	.810	.531	.668
	N	284	284	284	284	283	282	278	73	276	278	279	271	145	145
extraver	Pearson Correlation	.038	.044	.059	.142*	1.000	.188**	.212**	-.126	.047	-.146*	.013	-.093	-.009	.005
	Sig. (2-tailed)	.521	.461	.324	.017		.002	.000	.292	.438	.015	.834	.128	.912	.953
	N	283	283	283	283	283	281	277	72	275	277	278	271	144	144
agree	Pearson Correlation	.003	-.033	-.004	.047	.188**	1.000	.327**	-.190	.199**	.016	-.152*	.132*	.027	-.030
	Sig. (2-tailed)	.957	.583	.951	.429	.002		.000	.110	.001	.797	.011	.031	.752	.718
	N	282	282	282	282	281	282	278	72	275	276	277	269	145	145
conscien	Pearson Correlation	.023	.042	.016	.051	.212**	.327**	1.000	-.219	.189**	.120*	-.133*	.132*	.040	-.040
	Sig. (2-tailed)	.704	.486	.787	.393	.000	.000		.070	.002	.048	.028	.032	.637	.634
	N	278	278	278	278	277	278	278	69	272	272	273	265	142	142
openness	Pearson Correlation	.058	.067	-.163	.032	-.126	-.190	-.219	1.000	.009	-.097	.490**	-.212	.078	.161
	Sig. (2-tailed)	.628	.574	.168	.787	.292	.110	.070		.941	.427	.000	.081	.615	.298
	N	73	73	73	73	72	72	69	73	72	69	69	69	44	44
emostabl	Pearson Correlation	-.008	-.013	-.158**	.089	.047	.199**	.189**	.009	1.000	.115	-.026	.086	.063	.007
	Sig. (2-tailed)	.889	.829	.008	.141	.438	.001	.002	.941		.059	.668	.164	.459	.934
	N	276	276	276	276	275	275	272	72	276	271	271	263	140	140
NA	Pearson Correlation	.088	.091	-.079	-.097	-.146*	.016	.120*	-.097	.115	1.000	-.036	.330**	.008	-.046
	Sig. (2-tailed)	.142	.128	.188	.105	.015	.797	.048	.427	.059		.555	.000	.923	.591
	N	278	278	278	278	277	276	272	69	271	278	277	265	140	140
PA	Pearson Correlation	.019	.019	.092	.088	.013	-.152*	-.133*	.490**	-.026	-.036	1.000	-.318**	.272**	.115
	Sig. (2-tailed)	.752	.750	.125	.143	.834	.011	.028	.000	.668	.555		.000	.001	.174
	N	279	279	279	279	278	277	273	69	271	277	279	267	141	141
GSE	Pearson Correlation	-.031	-.034	-.128*	.015	-.093	.132*	.132*	-.212	.086	.330**	-.318**	1.000	-.030	-.023
	Sig. (2-tailed)	.614	.576	.035	.810	.128	.031	.032	.081	.164	.000	.000		.724	.790
	N	271	271	271	271	271	269	265	69	263	265	267	271	138	138
orgcommit	Pearson Correlation	-.076	-.004	.016	.053	-.009	.027	.040	.078	.063	.008	.272**	-.030	1.000	.673**
	Sig. (2-tailed)	.366	.965	.847	.531	.912	.752	.637	.615	.459	.923	.001	.724		.000
	N	145	145	145	145	144	145	142	44	140	140	141	138	145	145
jobsat	Pearson Correlation	-.004	.064	.040	-.036	.005	-.030	-.040	.161	.007	-.046	.115	-.023	.673**	1.000
	Sig. (2-tailed)	.957	.443	.637	.668	.953	.718	.634	.298	.934	.591	.174	.790	.000	
	N	145	145	145	145	144	145	142	44	140	140	141	138	145	145

**. Correlation is significant at the 0.01 level (2-tailed).

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14. ABSTRACT

High degrees of organizational turnover have been associated with decreased customer satisfaction, increased customer turnover, decreased employee productivity, decreased organizational performance, and decreased profitability. As such, more than 1,500 studies have been performed in the past 50 years on the topics of retention and turnover. This study aimed to examine possible relationships between the personality make up of Air Force officers and their retention within the United States Air Force. If present, such relationships might offer avenues for improving recruitment and retention efforts within the Air Force.
Between 1996 and 1997, 318 officer candidates attending the United States Air Force Officer Training School were administered personality surveys, including measures for extraversion, agreeableness, conscientiousness, openness to experience, emotional stability, positive and negative affect, and general self-efficacy. In 2009, the Air Force Personnel Center records of these officers were examined, and separation and retention data was collected for each participant. A correlation study was performed in order to determine which (if any) personality measures held significant relationships with observed turnover. Other variables were also considered, including job satisfaction, organizational commitment, and prior enlisted service. None of the personality measures demonstrated a significant relationship with turnover.

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